

[Return to Materials Evaluations](#)

### Hydrogum 5 Alginate Impression Material (Project 05-32) (3/06)

Hydrogum 5 is a new alginate by Zhermack, Inc, that purportedly does not need to be poured up in stone for up to 5 days (120 hours), if properly stored. The dust-free, fruit-flavored alginate is indicated for study models, opposing casts, and removable partial-denture frameworks impressions. Hydrogum 5 is reportedly easy to mix and has a fast setting time. The alginate is available in bulk and single-use packages.



#### Manufacturer:

Zhermack, Inc  
1380 Greg St, Suite 219  
Sparks, NV 89431  
(877) 819-6206  
(775) 331-9005  
(775) 331-6649 FAX  
[www.zhermack.com](http://www.zhermack.com)

#### Suggested Retail Price:

\$12.50 -one 453-gm bag, one storage canister, one measuring set (item #C302072)

#### Government Price:

\$8.75 (item number and contents as listed above)

#### ADVANTAGES:

- + Excellent detail reproduction and dimensional stability when immediately poured
- + Incorporates water quickly during spatulation
- + Smooth mix with few voids
- + Excellent flow characteristics
- + Separates cleanly and easily from teeth and gypsum casts
- + Competitively priced
- + Pleasant odor and taste

#### DISADVANTAGES:

- Failed ANSI/ADA Specification No. 18 for detail reproduction after 4 and 5 days of storage
- Loss of linear dimensional stability over 5 days
- Only available in a short working time
- More research necessary on dimensional stability over time

#### SUMMARY AND CONCLUSIONS:

Hydrogum 5 is a new alginate by Zhermack, Inc, that is marketed to be dimensionally stable for up to 5 days, if properly stored. The dust-free, fruit-flavored alginate is indicated for study models, opposing casts, and removable partial-denture frameworks impressions. Evaluators found that the material easily incorporated water, creating a very smooth mix with excellent flow characteristics, greater surface detail, and very few voids. The impression material did not stick to the teeth and no patients objected to the material's taste or odor. Working time was found to be too short by several evaluators. The instruction booklet does not provide details on disinfection or on proper longer-term storage conditions of the alginate impressions. Hydrogum 5 met ANSI/ADA Specification No. 18 for detail reproduction when immediately poured. However, after 4 and 5 days of storage, it failed to meet the standard. Also, after 5 days, the mean percent linear contraction was determined to be -1.611%, which was greater than the 0.5% linear variation reported by the manufacturer. More research is necessary examining the dimensional stability of Hydrogum 5 over time. Most evaluators rated Hydrogum 5 as "excellent" or "good" overall and all but one evaluator would purchase the competitively-priced alginate for use in their clinic. **Hydrogum 5** is rated **Excellent** for immediate use and **Marginal** for delayed use by US Air Force dental facilities.